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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,298	12/15/2000	Lahcen Bennai	Q62303	8442
23373	7590	05/31/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			MURPHY, RHONDA L	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/736,298

Applicant(s)

BENNAI ET AL.

Examiner

Rhonda Murphy

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/00.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on December 23, 2004. Accordingly, claims 1-7 are currently pending in this application.

Information Disclosure Statement

1. Examiner has considered reference number US 4,924,500. The PTO form 1449 contains a typographical error, which lists reference number US 5,924,500. The correction has been made and the reference is now considered.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

Art Unit: 2667

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities: Page 3, line 10 and page 4, line 9 contains an unclear statement: "data to be transmitted and/or to said access...". The statement shall be reworded.

Appropriate correction is required.

Claim Objections

1. Claim 4 is objected to because of the following informalities: "A method" in the first line of claim 4 shall be deleted and the word "an" on the second line of claim 4 shall be replaced with "a". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 4; claim 4, lines 4-5; and claim 7, line 5 contains an unclear statement: "data to be transmitted and said access, said method...". The statement shall be reworded in each claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 4,821,264).

Regarding claim 7, Kim teaches a method of communication in which: at least two accesses are used between two exchanges each having at least one information channel for transmitting voice and data (see Fig. 2), said method further comprising providing a common signaling channel for transmitting signaling signals relating to at least one of data to be transmitted to said accesses (Fig. 2, col. 3, lines 23-29), sharing on said common signaling channel signaling signals relating to at least two accesses

(col. 3, lines 25-38), and managing the two accesses using the signaling signals delivered by said common signaling channel (col. 3, lines 25-45).

6. Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Kato (US 6,683,880) and Kobayashi et al. (US 5,978,380).

Regarding claim 1, Kim teaches a communication method using a first access including at least one information channel for transmitting voice and first data and one signaling channel for transmitting signaling signals and second data relating to at least one of the first data to be transmitted to said access (col. 3, lines 10-22).

Kim fails to teach an additional channel on a different physical medium and order of priority of the use of the signaling channels and assigning the highest priority functional signaling channel to the access.

However, Kato teaches one additional signaling channel (Fig. 17) and determining an order of priority of the use of the signaling channels and assigning the highest priority functional signaling channel to the access (col. 5, lines 38-47; col. 6, lines 17-20).

In view of this, having the system of Kim and then given the teaching of Kato, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Kim, by incorporating a level of priority for the signaling channels, so as to improve reliability of the connecting service (col. 6, lines 21-23).

Furthermore, Kobayashi teaches at least one additional signaling channel on a different physical medium from said first signaling channel and for use in conjunction with said one information channel (col. 14, lines 56-62). Additionally, it would have been obvious to one skilled in the art to provide another signaling channel on a different type of physical medium, since various types of physical media are used in communication systems and depending on the available resources, a different type of medium will provide a more sufficient means of communication.

In view of this, it would have been obvious to one skilled in the art to modify the method of Kim, by including an additionally signaling channel on a different physical medium, so as to provide a more reliable means of communication.

Regarding claim 3, the combined method of Kim, Kato and Kobayashi teach a communication method using at least one B channel for transmitting voice and first data and at least two D channels, characterized in which an order of signal priority is determined.

Kim, Kato and Kobayashi fail to explicitly disclose regularly testing a highest priority signaling D channel when said channel is not in service.

However, official notice is taken of testing a signaling channel when the channel is not in service. It is known in the art that if a channel is determined to be not in service, a test must have been performed in order to conclude the channel inoperative.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to perform a test on the channel, thus providing reliability since transmission would not occur if the channel were inoperative.

Regarding claim 5, Kim teaches an access that provides thirty information channels (it is known in the art that primary rate access (PRA) – the international version of primary rate interface (PRI) – supports 30 information channels).

Regarding claim 6, the same limitations are taught as described in the rejection of claim 7. Kim teaches a channel formed in a signaling path of a second access (Fig. 2, col. 3, lines 25-41) is constituted as an additional signaling channel for use in conjunction with information channels of said first access (refer to the response to arguments below in reference to claim 7).

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, Kato and Kobayashi as applied to claim 1 above, and further in view Applicant's Admitted Prior Art (AAPA).

Regarding claim 2, the combined method of Kim, Kato and Kobayashi teach an information channel for transmitting voice and first data and at least one signaling channel.

Kim fails to explicitly disclose the information channel and signaling channel on a different physical medium.

However, Kato teaches an information channel on a different physical medium from one of the signaling channels (see Abstract).

Furthermore, the AAPA discloses information channels and signaling channels on different types of physical media (page 2, lines 14-23 of the specification).

In view of this, having the combined system of Kim, Kato and Kobayashi, and then given the teaching of AAPA, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide information and signaling channels on different physical medium, so as to provide a more reliable method of communication in the event of a failure.

Response to Arguments

Applicant's arguments filed December 23, 2004 have been fully considered but they are not persuasive. In regard to claim 7, applicant states Kim does not discuss having multiple accesses, just a single T-carrier.

However, Examiner disagrees. Kim teaches a T-carrier which contains 24 channels, wherein these channels form accesses between remote terminal 92 and central station 93. Furthermore, of the 24 channels, there exists a common signaling channel for transmitting signaling signals relating to the information channels. It is known in the art that multiple channels within the accesses can be linked to share a common signaling channel. Thus, the common signaling channel is shared amongst the information channels and provides signaling signals to manage the accesses. Therefore, this method allows a single signaling channel to support multiple accesses, and further provide a more reliable method of communication.

Allowable Subject Matter

6. Claim 4 is allowed. Regarding claim 4, prior art fails to disclose the step of neutralizing at least one, but less than all, of the information channels, if the signaling channel in service is not sufficiently functional.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.


Art Unit: 2667

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy
Examiner
Art Unit 2667

rlm


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 5/27/05